

## ABSTRACT:

The invention relates to an X-ray examination apparatus and a method for forming an X-ray image by means of a processing unit (2) for the correction of image data. In order to achieve automatic correction of imaging defects that are caused by imperfections in the imaging and processing chain, the processing unit (2) is succeeded by a defect detection unit (3) for the detection of image defects that can be detected on the basis of image parameters that can be extracted from image data acquired during clinical examinations, and is suitable for adapting processing parameters (15-21) that are used in the processing unit (2) in dependence on the detected image defects. For the detection of image defects that are caused notably by defective sensor elements or pixels of the X-ray detector there is provided a filter unit (37) which forms a defect table for defective sensor elements in dependence on a threshold value; on the basis of such a defect table a correction table (20) is formed in the processing unit (2) in order to be applied to the image data.

Fig. 1